

Textiles - Determination of the content of compounds based on chlorobenzenes and chlorotoluenes

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 17137:2018 sisaldab Euroopa standardi EN 17137:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 17137:2018 consists of the English text of the European standard EN 17137:2018.
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English Version

Textiles - Determination of the content of compounds
based on chlorobenzenes and chlorotoluenes

Textiles - Détermination de la teneur de composés à
base de chlorobenzènes et chlorotoluènes

Textilien - Bestimmung des Gehaltes von
Verbindungen auf der Basis von Chlorbenzol und
Chlortoluol

This European Standard was approved by CEN on 3 September 2018.

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Contents

Page

European foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Principle	4
5 Apparatus	4
6 Reagents	5
7 Procedure	6
7.1 Sampling and test specimen preparation.....	6
7.2 Extraction.....	6
7.3 Filtration	6
7.4 Gas chromatographic determination.....	6
7.5 Calibration	6
7.6 Calculation and expression of the results	7
8 Reliability of the method	7
9 Test report	7
Annex A (informative) Chromatographic analyses	8
A.1 Capillary gas chromatography/mass selective detector (GC-MS)	8
Annex B (informative) Reliability of the method	11
B.1 General	11
B.2 Accuracy	11
B.3 Detection Limit (LOD) and Quantification Limit (LOQ)	12
B.4 Repeatability	13
B.5 Reproducibility	14
B.6 Robustness	15
B.7 Selectivity	16
B.8 Extraction Efficiency	17
Bibliography	18

European foreword

This document (EN 17137:2018) has been prepared by Technical Committee CEN/TC 248 “Textiles and textile products”, the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2019 and conflicting national standards shall be withdrawn at the latest by May 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document is based on DIN 54 232, which was created by the Working Committee NA 062-05-12 AA “Textiles chemical test methods and fibre separation” of the Standard Committee Testing (NMP) in the DIN Deutsches Institut for Standardization.

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1 Scope

This document specifies a method of analysis for determining the content of chlorobenzenes and chlorotoluenes in textile products made of components such as outer fabric, interlining, lining, plastic slide fasteners, plastic buttons, labels, threads and appliques.

The method applies to a mass fraction of 0,1 mg/kg to 10 mg/kg per single isomer. Both higher and lower concentrations can be determined if the mass of the sample is selected accordingly or if appropriate dilutions are made during the analysis.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

component

individual part (one material) of the textile product sample

3.2

composite test specimen

test specimen composed from various sub-test specimens of components

4 Principle

The cut test specimen is extracted via ultrasonication in a closed vessel using dichloromethane. Interfering particles and fibres are removed by filtering through membrane filters. Without additional purification, the extract is analysed to determine the content of chlorobenzenes and chlorotoluenes by GC-MS with selected ion mode, using an internal standard for quantification.

5 Apparatus

5.1 Standard laboratory equipment.

5.2 Glass vials with tight closure.

NOTE Vial volumes of 40 ml to 100 ml have been found suitable.

5.3 Ultrasonic bath for extraction.

5.4 Analytical balance, resolution of at least 0,000 1 g.

5.5 Syringes with Luer Lock, 2 ml, with disposable syringe filters, made of polytetrafluoroethylene (PTFE) membrane.

NOTE Pore size of 0,45 µm has been found suitable.

5.6 Gas chromatograph with mass selective detector (MSD).